

You will need:

- A pencil
- A ruler
- Your workbook or paper
- Coloured pen or pencil

12/01/2021

Rounding to the nearest decimal

Can round decimals to the nearest whole number
and to one or two decimal places

Rounding to the nearest whole number



What is **19.7** rounded to the nearest whole number?

When rounding to the **nearest whole number**, we look at the **tenths** column.

19.7

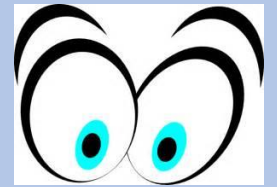
7 tenths

7 tenths is **more than 5 tenths** so we round **up**.

19.7 rounded to the nearest whole number is **20**.

Can round decimals to the nearest whole number
and to one or two decimal places

Rounding to the nearest whole number



What is **25.68** rounded to the nearest whole number?

When rounding to the **nearest whole number**, we look at the **tenths** column.

25.**68**

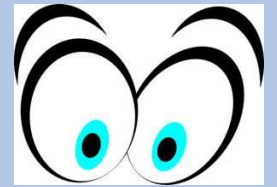
← 6 tenths

6 tenths is **more than 5 tenths** so we round **up**.

25.68 rounded to the nearest whole number is **26**.

Can round decimals to the nearest whole number
and to one or two decimal places

Rounding to the nearest whole number



What is **148.39** rounded to the nearest whole number?

When rounding to the **nearest whole number**, we look at the **tenths** column.

148.**39**

3 tenths

3 tenths is **less than 5 tenths** so we round **down**.

148.39 rounded to the nearest whole number is **148**.

Can round decimals to the nearest whole number
and to one or two decimal places

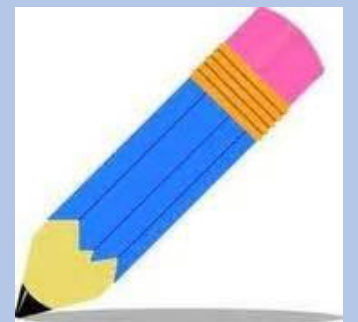
Your turn

Round these numbers to the nearest whole number.

57.9

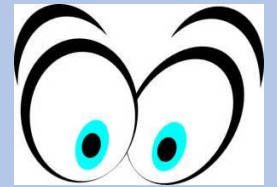
27.14

645.49



Can round decimals to the nearest whole number and to one or two decimal places

Rounding to the nearest tenth



What is **5.28** rounded to the nearest tenth?

5.28

8 hundredths

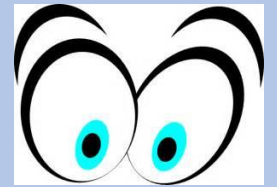
When rounding to the **nearest tenth**, we look at the digit in the **hundredths** column.

8 hundredths is **more than 5 hundredths** so we round **up**.

5.28 rounded to the nearest tenth is **5.3**.

Can round decimals to the nearest whole number and to one or two decimal places

Rounding to the nearest tenth



The question may also be phrased as:
What is **3.82** rounded to one decimal place?

3.82

2 hundredths

We still need to round to the **nearest tenth**, so we still look at the digit in the **hundredths** column.

2 hundredths is **less than 5 hundredths** so we round **down**.

3.82 rounded to one decimal place is **3.8**.

Can round decimals to the nearest whole number
and to one or two decimal places

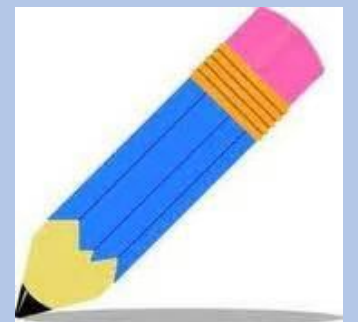
Your turn

Round these numbers to the nearest tenth
(one decimal place).

4.27

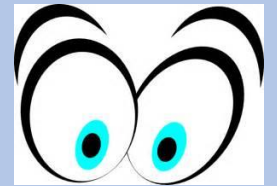
6.34

28.36



Can round decimals to the nearest whole number
and to one or two decimal places

Rounding to the nearest hundredth



What is **6.392** rounded to the nearest hundredth?

When rounding to the **nearest hundredth**, we look at the digit in the **thousandths** column.

6.39**2**

← 2 thousandths

2 thousandths is **less than 5 thousandths** so we round **down**.

6.392 rounded to the nearest hundredth is **6.39**.

Can round decimals to the nearest whole number and to one or two decimal places

Rounding to the nearest hundredth



The question may also be phrased as:
What is **12.345** rounded to two decimal places?

We still need to round to the **nearest hundredth**, so we still look at the digit in the **thousandths** column.

12.34**5**

5 thousandths

5 thousandths is **exactly half way** so we round **up**.

12.345 rounded to two decimal places is **12.35**.

Can round decimals to the nearest whole number
and to one or two decimal places

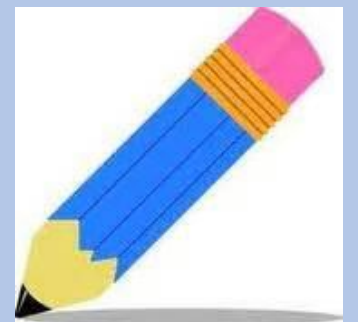
Your turn

Round these numbers to the nearest hundredth
(two decimal places).

7.494

15.429

23.185



B2

Copy and complete by choosing one of the numbers in the brackets.

- 1 2.4 → (2, 3)
- 2 6.6 → (6, 7)
- 3 12.9 → (12, 13)
- 4 1.1 → (1, 2)
- 5 9.5 → (9, 10)
- 6 4.37 → (4.3, 4.4)
- 7 1.92 → (1.9, 2.0)
- 8 2.75 → (2.7, 2.8)
- 9 5.48 → (5.4, 5.5)
- 10 1.63 → (1.6, 1.7)

Round to the nearest:

- a) pound
- b) 10p.

- | | |
|-----------|-----------|
| 11 £5.26 | 17 £1.05 |
| 12 £8.94 | 18 £96.68 |
| 13 £7.45 | 19 £2.44 |
| 14 £11.72 | 20 £81.56 |
| 15 £9.39 | 21 £5.03 |
| 16 £3.21 | 22 £10.99 |

B1

- | | |
|---------|----------|
| 1 1.37 | 6 8.427 |
| 2 6.536 | 7 2.883 |
| 3 4.26 | 8 91.109 |
| 4 31.95 | 9 1.692 |
| 5 7.74 | 10 13.36 |

Round to the nearest hundredth.

- | | |
|-----------|-----------|
| 11 0.759 | 16 0.523 |
| 12 4.394 | 17 5.976 |
| 13 1.162 | 18 61.468 |
| 14 17.285 | 19 20.831 |
| 15 3.007 | 20 6.625 |

Round to the nearest:

- a) 100 g
- b) 10 g.

- | |
|---------------|
| 21 1.348 kg |
| 22 10.782 kg |
| 23 9.145 kg |
| 24 21.096 kg |
| 25 152.563 kg |
| 26 0.177 kg |
| 27 34.459 kg |
| 28 273.105 kg |

Bonus Challenge

hundredth.

- | | |
|----------|----------|
| 1 0.326 | 6 6.737 |
| 2 2.583 | 7 0.175 |
| 3 14.952 | 8 51.249 |
| 4 1.808 | 9 3.761 |
| 5 2.093 | 10 8.454 |

Round to the nearest thousandth.

- | | |
|-----------|-----------|
| 11 1.7292 | 16 0.1739 |
| 12 0.3546 | 17 6.1371 |
| 13 2.1062 | 18 2.8653 |
| 14 3.4128 | 19 5.2982 |
| 15 1.0851 | 20 0.5417 |

Round to the nearest:

- a) $\frac{1}{100}$
- b) $\frac{1}{1000}$

- | |
|----------------|
| 21 3.636363 |
| 22 0.372519 |
| 23 1.81912 |
| 24 7.054806 |
| 25 4.513513 |
| 26 0.714285714 |
| 27 6.157894737 |
| 28 1.0053816 |

Answers

B2

A

1 2
2 7

3 13
4 1

5 10
6 4.4

7 1.9
8 2.8

9 5.5
10 1.6

11 a) £5
12 a) £9
13 a) £7
14 a) £12
15 a) £9
16 a) £3

b) £5.30
b) £8.90
b) £7.50
b) £11.70
b) £9.40
b) £3.20

17 a) £1
18 a) £97
19 a) £2
20 a) £82
21 a) £5
22 a) £11

b) £1.10
b) £96.70
b) £2.40
b) £81.60
b) £5.00
b) £11.00

B

1 1.4
2 6.5
3 4.3
4 32.0
5 7.7

6 8.4
7 2.9
8 91.1
9 1.7
10 13.4

11 0.76
12 4.39
13 1.16
14 17.29
15 3.01

16 0.52
17 5.98
18 61.47
19 20.83
20 6.63

21 a) 1.3 kg
22 a) 10.8 kg
23 a) 9.1 kg
24 a) 21.1 kg

b) 1.35 kg
b) 10.78 kg
b) 9.15 kg
b) 21.1 kg

25 a) 152.6 kg
26 a) 0.2 kg
27 a) 34.5 kg
28 a) 273.1 kg

b) 152.56 kg
b) 0.18 kg
b) 34.46 kg
b) 273.11 kg

B1

C

1 0.33
2 2.58
3 14.95
4 1.81
5 2.09

6 6.74
7 0.18
8 51.25
9 3.76
10 8.45

11 1.729
12 0.355
13 2.106
14 3.413
15 1.085

16 0.174
17 6.137
18 2.865
19 5.298
20 0.542

Bonus Challenge

21 a) 3.64
22 a) 0.37
23 a) 1.82
24 a) 7.05

b) 3.636
b) 0.373
b) 1.819
b) 7.055

25 a) 4.51
26 a) 0.71
27 a) 6.16
28 a) 1.01

b) 4.514
b) 0.714
b) 6.158
b) 1.005